

What Is Claimed Is:

1. A steel pipe having a low yield ratio, characterized in that:

the steel pipe contains, in mass, 0.01% to 0.20% C, 0.05 to 1.0% Si, 0.1% to 2.0% Mn, 0.001% to 0.05% Al, with a balance consisting of Fe and unavoidable impurities, wherein a microstructure of the steel pipe is composed of ferrite and at least one of pearlite and cementite, and wherein an average size of grains of the ferrite in the microstructure is at least 20 μm .
2. The steel pipe according to claim 1, wherein the microstructure contains one of a spheroidized pearlite and a spheroidized cementite.
3. The steel pipe according to claim 2, the average size of grains of one of the pearlite and the cementite is not larger than 20 μm .
4. The steel pipe according to any one of claims 1 to 3, wherein the steel pipe contains, in mass, at least one of 0.01% to 0.5% Nb and 0.001% to 0.01% N.
5. The steel pipe according to claim 1, wherein the steel pipe contains, in mass, at least one of 0.005% to 0.1% Ti and 0.0001% to 0.005% B.
6. The steel pipe according to claim 1, wherein the steel pipe contains, in mass, at least one of 0.01% to 0.5% V, 0.01 %to 1% Cu, 0.01% to 1% Ni, 0.01% to 1% Cr and 0.01% to 1% Mo.

7. A steel pipe having a low yield ratio, characterized in that:

the steel pipe contains, in mass, 0.03% to 0.20% C, 0.05% to 1.0% Si, 0.1% to 2.0% Mn, 0.001% to 0.05% Al, 0.01% to 0.5% Nb, 0.001% to 0.01% N, with a balance consisting of Fe and unavoidable impurities, wherein a microstructure of the steel pipe is composed of ferrite and bainite, and wherein an average size of grains of the ferrite in the microstructure is at least 20 μm .

8. The steel pipe according to claim 7, wherein the bainite has a content rate which is, based on a volume fraction, in the range from 1% to 15%.

9. The steel pipe according to claim 7 or 8, wherein the steel pipe contains, in mass, at least one of 0.005% to 0.1% Ti and 0.0001% to 0.005% B.

10. The steel pipe according to claim 7 or 8, wherein the steel pipe contains, in mass, at least one of 0.01% to 0.5% V, 0.01 %to 1% Cu, 0.01% to 1% Ni, 0.01% to 1% Cr and 0.01% to 1% Mo.

11. A steel pipe having a low yield ratio, characterized in that:

the steel pipe contains, in mass, 0.03% to 0.20% C, 0.05% to 1.0% Si, 0.1% to 2.0% Mn, 0.001% to 0.05% Al, 0.01% to 0.5% Nb, 0.001% to 0.01% N, with the balance consisting of Fe and unavoidable impurities, wherein a microstructure of the steel pipe is composed of one set of:

ferrite, martensite and bainite, or

ferrite and martensite, and

wherein an average size of grains of the ferrite is at least 20 μm .

12. The steel pipe according to claim 11, wherein the bainite has a content rate that is, based on a volume fraction, in the range from 1% to 15%.

13. The steel pipe according to claim 11, wherein the martensite has a content rate that is, based on a volume fraction, in the range from 1% to 15%.

14. The steel pipe according to any one of claims 11 to 13, wherein the steel pipe contains, in mass, at least one of 0.005% to 0.1% Ti and 0.0001% to 0.005% B.

15. The steel pipe according to any one of claims 11 to 13, wherein the steel pipe contains, in mass, at least one of 0.01% to 0.5% V, 0.01 %to 1% Cu, 0.01% to 1% Ni, 0.01% to 1% Cr and 0.01% to 1% Mo.